中国蚋科的新种和新纪录

谭娟杰 周佩燕 (中国科学院北京动物研究所)

我国蚋科的分类研究工作,过去很少进行,迄今仅东北、西北、新疆、河北、台湾等省、区有部分纪录。根据我们近年来在东北、华北等地采集的标本,经整理、鉴定,发现其中有二新种及十个我国新纪录。现将新种的描述和新纪录种的名录记述如下。所有模式标本均保存于中国科学院北京动物研究所。

一、新种记述

1. 北方短蚋 Odagmia septentrionalis 新种(图 1 a, b)

雄: 体长 2.8—3.0 毫米。触角黑褐。额、颜具银灰色粉被。中胸背板黑色,密被金色毛,前端具两个清楚的马蹄形银白斑,背板后缘有横的银白斑。足大部分黑色或黑褐色,

前足胫节有银白斑,黄色部分: 前足基节、中足腿节基部、中足胫节基部 1/3、后足腿节及胫节基部 1/4—1/5、后跗第一节基半部。有时足的颜色较淡,腿节、胫节大部分黄色。 腹节、胫节大部分黄色。 腹节、胫节大部分黄色。 腹部 2、6—7 节背板侧面有银斑。 外生殖器: 生殖腹板分枝的末端几丁质化强,向前后突出。 生殖腹板主体的端部向前后突出,前面的尖突里鸭嘴形,末端尖锐,横宽约为后面发生, 種发生, 其 6—7 个尖齿。生殖叉骨如图 1。 阳茎基侧突具 8—10 根略等长的刺。

雌: 体长约3毫米。 触角黑色,基部二节黄色。额、颜具银灰色粉被。 中胸背板底色黑,密被金色毛,前端具两个清楚的马蹄形银白斑。 足大部分黑色,黄色部分: 前足基节、中后足腿节基部1/5、中、后足胫节基半部和后跗第一节基部

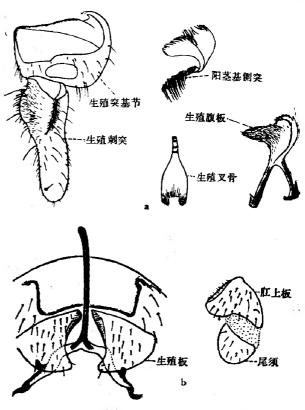


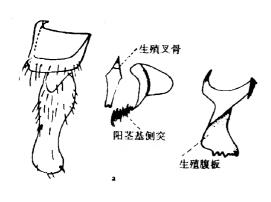
图 1 北方短蚋 Odagmia septentrionalis 新种 a.o[¬]外生殖器; b.♀外生殖器

2/3,后跗第二节基半部。有时足大部分棕黄色,仅腿节、胫节端部及后跗第一节端部 1/4 黑色。雌外生殖器与 Odagmia baracornis acutiphallus Rubzov 近似,但肛上板形状稍不同。

正模♂,配模♀:北京(1972. VI. 30)。副模 2♂♂,1♀: 采集地点同上(1965. X;1972. VI. 30)。

2. 溪蚋 Simulium rheophilum 新种(图 2 a, b)

雄: 体长 2.0—2.6 毫米。触角黑色,基部二、三节淡棕色。额、颜都是银灰色。中胸背板底色黑,密被红铜色毛,自肩部两侧斜向中央各有一个长方形银白斑,沿后缘有一个



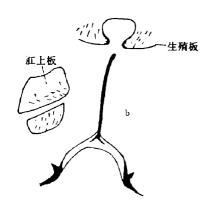


图 2 溪納 Simulium rheophilum 新种 a.♂外生殖器; b.♀外生殖器

银白色宽横斑与两侧的银斑相连。腹部第2节及第5—7节背板两侧有银白斑。 前足腿节末端棕色、前足胫节末端及五个跗节、中足基节、中足腿节和胫节及中跗第一节的端部黑色或黑褐色,前、中足的其余部分淡黄色;后足腿节基半部、后足胫节最基部和中部前缘棕黄,其余部分黑褐色。 有时后足腿节和胫节除基部颜色较淡以外,几乎完全黑褐色。 生殖刺突钩形,长度稍超过基部宽度的三倍,末端有一小刺。生殖腹板楔形,端部膨大,端缘有5个小齿。生殖叉骨箭头形,前端 1/3 最宽。阳茎基侧突具很多长短不等的细刺。

雌: 体长 2.0—2.8 毫米。 触角黑色,基 部三节,有时基部五节,棕黄色。额黑亮,颜 银灰色。中胸背板黑灰色,密被红铜色毛,前 端银斑不明显。腹部第二节背板中部有一个 横银斑。足颜色较淡,除前足跗节及中、后足 基节黑色外,腿节和胫节的大部分淡黄色,仅 端部黑色。 外生殖器: 生殖板三角形,端角 略圆;肛上板横宽,呈不规则的横长方形。

正模♂,配模♀:北京(1972. VI. 21)。 副模 19♂♂, 24♀♀,采集地点、时间同上。

本种与远纳 Simulium remotum Rubzov 较近似,主要区别在: 雌、雄的外生殖器不同,足的颜色不同。

二、新纪录种名录

- 1. 刺扰原蚋 Prosimulium irritans (Rubzov)——分布: 黑龙江。
- 2. 灰背真蚋 Eusimulium subgriseum (Rubzov)——分布: 北京市。
- 3. 山溪真蚋 Eusimulium armeniacum Rubzov——分布: 内蒙古。
- 4. 宽足真蚋 Eusimulium latipes (Meigen)——分布: 黑龙江。

- 5. 沟额维蚋 Wilhelmia veltistshevi (Rubzov)——分布: 内蒙古。
- 6. 褐足维蚋 Wilhelmia turgaica (Rubzov)——分布: 北京市,内蒙古。
- 7. 宽跗布蚋 Byssodon transiens (Rubzov)——分布: 内蒙古。
- 8. 淡足吉蚋 Gnus malyshevi (Dorgostajskij et Rubzov)——分布: 黑龙江。
- 9. 巨特蚋 Tetisimulium alajensis (Rubzov)——分布: 辽宁。
- 10. 曲跗蚋 Simulium curvitarse Rubzov*---分布: 黑龙江。

参考资料

- Crosskey, R. V. 1969 A re-classification of the Simuliidae (Diptera) of Africa and its Islands. Bull. Brit. Mus. (Nat. Hist.) Ent., Supple. 14.
- Rubzov, I. A. 1964 Simuliidae (Melusinidae) In E. Lindner's "Die Fliegen der Palaearkischen Region", Band 3, 4.
- Smart, J. 1945 The classification of the Simuliidae (Diptera). Trans. B. Ent. Soc. London, 95: 463-532.
- Takahasi, H. 1940-42 Insecta Matsum., 15(1-2):69-74, 16(1-2), 36-43.
- Takahasi, H. 1948. Simuliidae of Shansi, China. Mushi, 18 (10): 65-6.
- Рубцов, И. А. 1956 Мошки (сем. Simuliidae) Фауна СССР. Насекомые Двукрылые 6 (6) М-Л: 3—860.

^{*} 曲跗蚋 Simulium curvitarse Rubzov 未发现雄蚋。

NEW SPECIES AND NEW RECORDS OF SIMULIIDAE (DIPTERA) FROM CHINA

TAN CHUAN-CHIEH AND CHOW PEI-YEN
(Peking Institute of Zoology, Academia Sinica)

The present paper deals with 12 species of Chinese Simuliidae. Among them 2 species are described as new and 10 species are recorded for the first time from this country. All the type specimens are kept in the Peking Institute of Zoology, Academia Sinica.

Odagmia septentrionalis Tan et Chow, sp. nov. (fig. 1)

of: Body length, 2.8—3.0 mm.

Antennae fuscous. From and face covered with silver-grey tomentum. Mesonotum black, densely covered with golden yellow adpressed hairs; anteriorly there is a pair of clearly defined horse-shoe-shaped silver-white spots and a silver-white transverse band along the posterior margin. Legs largely black or black-brown. Fore-tibiae each with a silver-white patch anteriorly. Anterior coxae, base of middle femora, base or basal half of middle tibiae, basal one-third of the first segment of mid-tarsi, posterior femora and basal one-fourth to one-fifth of posterior tibiae and basal half of the first segment of posterior tarsi yellow. Sometimes the legs are lighter in colour, with femora and tibiae almost entirely yellow, only their apices black. There is a silver patch on each side of tergal segments 2 and 6—7.

Genitalia: Genital plate expanded both anteriorly and posteriorly. The anterior expansion is duck-bill-like, somewhat pointed at tip and about one and a half times the width of the posterior expansion. The latter is strongly developed, armed with 6—7 pointed teeth. The two arms of the genital plate are strongly chitinized at apex. Genital furca as shown in fig. 1. Paramere with 8—10 spines, which are about equal in length.

♀: Body length, about 3 mm.

Antennae black, the two basal segments yellow. Frons and face covered with silver-grey tomentum. Mesonotum black, densely covered with golden yellow adpressed hairs; there are two distinct horse-shoe-shaped silver-white spots anteriorly. Legs largly black, yellow parts are: anterior coxae, basal one-fifth of the middle and posterior femora, basal half of the middle and posterior tibiae and basal two-third and basal half of the lst and 2nd posterior tarsal segments respectively. Sometimes the legs are largely yellow-brown, with only the femora, apex of tibiae and apical one-fourth of the lst tarsal segment of posterior tarsi black.

Genitalia: somewhat similar to those of Odagmia baracornis acutiphallus Rubzov, but the anal plate is different in shape.

Holotype of, Allotype Q, Peking (1972, VI. 30).

Paratypes 2 of, 19. Locality same as above (1965. X; 1972. VI. 30).

Simulium rheophilum Tan et Chow, sp. nov. (fig. 2)

 \circ : Body length, 2.0—2.6 mm.

Antennae black, basal two or three segments brownish. From and face siver-grey. Mesonotum black, densely covered with cupreous-red adpresses hairs; on each side, there is a silver-white rectangular patch extending obliquely from humeral angle to center of notum; along the posterior margin of notum, there is a broad silver-white band which connected with the rectangular patch laterally.

Somewhat allied to Simulium remotum Rubzov, distinguished by the following characters: genital stylus hook-like, its length slightly more than three times its basal width; proximal portion of the genital plate enlarged, its proximal margin armed with 5 denticles; genital furca arrow-headed in shape, broadest at anterior one-third. Basal half of the posterior femora, base and anterior margin of posterior tabiae fulvous, the rest fuscous. Sometimes the posterior femora and tibiae almost entirely dark brown, with their very bases paler.

Q: Body length, 2.0—2.8 mm.

Antennae black, basal 3 to 5 segments yellowish-brown. From shinning black. Face silver-grey. Mesonotum dark grey and densely covered with cupreous-red adpressed hairs; silver-white patches indistinct. Differs from Simulium remotum Rubzov chiefly by: genital plate triangular in shape, with inner apical angles somewhat rounded; anal plate transverse, broader than long, irregular rectangular in shape; legs paler, with femora and tibiae almost entirely yellowish, only black at very tip.

Holotype 3, allotype Q, Peking (1972. VI. 21). Paratypes 19 3, 24 Q Q, locality and date same as above.

List of new records

- 1. Prosimulium irritans (Rubzov)
- 2. Eusimulium subgriseum (Rubzov)
- 3. Eusimulium armeniacum Rubzov
- 4. Eusimulium latipes (Meigen)
- 5. Wilhelmia veltistshevi (Rubzov)
- 6. Wilhelmia turgaica (Rubzov)
- 7. Byssodon transiens (Rubzov)
- 8. Gnus malyshevi (Dorgostajskil et Rubzov)
- 9. Tetisimulium alajensis (Rubzov)
- 10. Simulium curvitarse Rubzov